

IN THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in this application:

Claim 1 (Currently Amended): A purified citrullinated polypeptide which reacts with rheumatoid arthritis-specific anti-filaggrin autoantibodies, and is selected from the group consisting of:

a) a citrullinated α -chain of a mammalian fibrin;

b) a citrullinated polypeptide resulting from the action of peptidyl arginine deiminase on an α -chain of a mammalian fibrinogen; and

c) a fragment of at least 5 consecutive amino acids of a) and which also comprises at least one citrulline residue.

Claim 2 (Cancelled).

Claim 3 (Currently Amended): The citrullinated polypeptide as claimed in claim 1, which is a) and wherein said mammalian fibrin is human fibrin.

Claim 4 (Cancelled).

Claim 5 (Currently Amended): An antigenic composition for diagnosing the presence of rheumatoid arthritis-specific anti-filaggrin autoantibodies in a biological sample, comprising at least one citrullinated polypeptide as claimed in claim 1, optionally labeled with or conjugated to a carrier molecule.

Claim 6 (Currently Amended): A method for detecting rheumatoid arthritis specific anti-filaggrin autoantibodies in a biological sample, which method comprises:

contacting said biological sample with at least one polypeptide as claimed in claim 1, under conditions which allow the formation of an antigen/antibody complex with the rheumatoid arthritis-specific autoantibodies possibly present; and
detecting the antigen/antibody complex possibly formed.

Claim 7 (Currently Amended): A kit for detecting rheumatoid arthritis-specific anti-filaggrin autoantibodies in a biological sample, comprising at least one polypeptide as claimed in claim 1, and buffers and reagents suitable for constituting a reaction medium which allows the formation of an antigen/antibody complex.

Claims 8-10 (Cancelled).

Claim 11 (Previously Presented): The antigenic composition according to claim 5, wherein said citrullinated polypeptide is labeled.

Claim 12 (Previously Presented): The antigenic composition according to claim 5, wherein said citrullinated polypeptide is conjugated to a carrier molecule.

Claim 13 (Previously Presented): The purified citrullinated polypeptide according to claim 1, which is a).

Claim 14 (Previously Presented): The purified citrullinated polypeptide according to claim 1, which is b).

Claim 15 (Previously Presented): The purified citrullinated polypeptide according to claim 1, which is c).

Claim 16 (Previously Presented): The antigenic composition according to claim 5, wherein said citrullinated polypeptide is a).

Claim 17 (Previously Presented): The antigenic composition according to claim 5, wherein said citrullinated polypeptide is b).

Claim 18 (Previously Presented): The antigenic composition according to claim 5, wherein said citrullinated polypeptide is c).

Claim 19 (Previously Presented): The method according to claim 6, wherein said citrullinated polypeptide is a).

Claim 20 (Previously Presented): The method according to claim 6, wherein said citrullinated polypeptide is b).

Claim 21 (Previously Presented): The method according to claim 6, wherein said citrullinated polypeptide is c).

Claim 22 (Previously Presented): The kit according to claim 7, which further comprises reagents for detecting said antigen/antibody complex.